

1							
	+		+	+	+		
ABC7	MHSWRWAAAA	AAFEKRRHSA	ILIRPLVSVS	GSGPQWRPHQ	LGALGTARAY		
Atmlp	MLLLPRCPVI	GRIVRSKFRS	GLIRNHSPVI	.....	.....		
	+	+	+	+			
51							
ABC7	QIPESLKSIT	WQRLGKGNSSG	QFLDAAKALQ	VWPLIEKRTC	WHGHAGGGLH		
Atmlp	.FTVSKLSTQ	RPLLFNSAVN	LWNQAQKIDIT	HKKSVEQFSS	APKVKTQVKK		
101							
ABC7	TDPKEGLKDV	DTRKIIKAML	SYVWPKDRPD	LRARVAISLG	FLGGAKAMNI		
Atmlp	TSKAPTLSL	...KILKDLF	RYIWPKGNK	VRIRVLIALG	LLISAKILNV		
					TM1		
151							
ABC7	VVPFMFKYAV	DSL NQMSGNM	LNLS DAPNTV	ATMATAVLIG	YGVS RAGAAF		
Atmlp	QVPFFFKQTI	DSMN.....	IAWDDPTVAL	PAAIGLTI LC	YGVARFGSVL		
					TM2		
201							
ABC7	FNEVRNAVFG	KVAQNSIRRI	AKNVFLHLHN	LDLGFHLSRQ	TGALS KAIDR		
Atmlp	FGELRNAVFA	KVAQNAIRTV	SLQTFQHLMK	LDLGWHLSRQ	TGGLTRAMDR		
251							
ABC7	GTKGISFVLS	ALVFNL LPI M	FEVMLVSGVL	YYKCGAQFAL	VTLGT L GTYT		
Atmlp	GTKGISQVLT	AMVFHIIPIS	FEISVVC GIL	TYQFGASFAA	ITFSTMLLYS		
		TM3			TM4		
301							
ABC7	AFTVA V TRW	RTRFRIEMNK	ADNDAGNAAI	DSL LNYETVK	YFN NERYEAQ		
Atmlp	IFTI . KTTAW	RTHFRRDANK	ADNKAASVAL	DSL INFEAVK	YFNNEKY LAD		
350							
ABC7	RYDGFLKTYE	TASLKSTSTL	AMLNFGQSAI	FSVGLTAIMV	LASQGIVAGT		
Atmlp	KYNGSLMNYR	DSQIKVSQSL	AFLNSGQNLI	FTTALTAMMY	MGCTGVIGGN		
				TM5			
400							
ABC7	LTVGDLVMVN	GLLFQLSLPL	NFLGTVYRET	RQALIDMNTL	FTLLKVD TQI		
Atmlp	LTVGDLVLIN	QLVFQLSVPL	NFLGSVYRDL	KQSLIDMETL	FKLRKNEVKI		
		TM6					
450							
ABC7	KDKVMASPLQ	ITPQTA . TVA	FDNVHF EYIE	GQKVLSGISF	EVPA GKKVAI		
Atmlp	KN . . AERPLM	LPENVPYDIT	FENVTFGYHP	DRKILKNASF	TIPAGWKTAI		
499							
ABC7	VGGSGSGKST	IVRL LFRFYE	PQKGS IYLAG	QNIQDV SLES	LRRAVGVVPQ		
Atmlp	VGSSGSGKST	ILKL VFRFYD	PESGRILING	RDIKEYDIDA	LRKVIGVVPQ		
	Walker A						
549							
ABC7	DAVLFHNTIY	YNLLYGNISA	SPEEVYAVAK	LAGLHDAILR	MPHGYDTQVG		
Atmlp	DTPLFNDTIW	ENVKFGRIDA	TDEEVITVVE	KAQLAPLIKK	LPQGFD TIVG		
599							
ABC7	ERGLKLSGGE	KQRVAIARAI	LKDPPVILYD	EATSSLD SIT	EETILGAMKD		
Atmlp	ERGLMISGGE	KQRLAIARVL	LKNARIMFFD	EATSALDTH T	EQALLRTIRD		
	C			Walker B			
649							
ABC7	VVK . . HRTSI	FIAHRLSTVV	DADEI I VLDQ	GKVAERGTHH	GLLANPHSIY		
Atmlp	NFTSGSRTSV	YIAHRLRTIA	DADKI I VLDN	GRVREEGKHL	ELLAMP GSLY		
697							
ABC7	SEMWHTQSSR	VQNHDNPKEE	AKKENISKEE	ERKKLQEEIV	NSVKGCGNCSC *		
Atmlp	RELWTIQ...	.....	...EDLDHLE	NELKDQQEL *			

FIGURE 1A

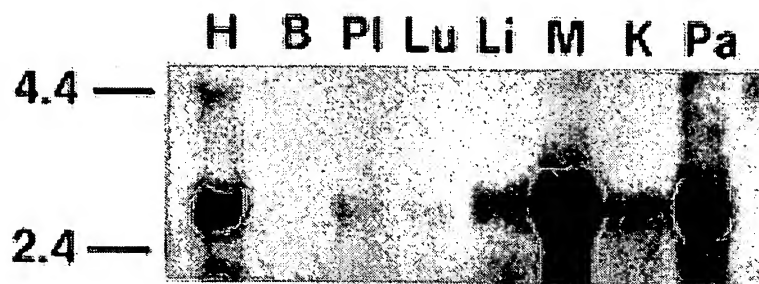
1	ATGGCGCTGC	TCGCGATGCA	TTCTTGGCGC	TGGGCGGCCG	CGGCGGCTGC
51	TTTCGAAAAG	CGCCGGCACT	CCGCGATTCT	GATCCGGCCT	TTAGTCTCTG
101	TTAGCGGCTC	AGGTCCGCAG	TGGAGGCCAC	ATCAACTCGG	CGCCTTGGGA
151	ACCGCTCGAG	CCTACCAGAT	TCCAGAGTCA	TTAAAAAGTA	TCACATGGCA
201	GAGATTGGGA	AAAGGCAATT	CAGGACAGTT	CTTAGATGCT	GCAAAGGCTC
251	TCCAGGTATG	GCCACTGATA	GAAAAGAGGA	CATGTTGGCA	TGGTCATGCA
301	GGAGGAGGAC	TCCACACAGA	CCCAAAAGAA	GGGTTAAAAG	ATGTTGATAC
351	TCGGAAAATC	ATAAAAGCAA	TGCTTTCTTA	TGTGTGGCCC	AAAGACAGGC
401	CAGATCTACG	AGCTAGAGTT	GCCATTTCGC	TGGGATTTTT	GGGTGGTGCA
451	AAGGCCATGA	ATATTGTGGT	TCCCTTCATG	TTTAAATATG	CTGTAGACAG
501	CCTCAACCAG	ATGTCGGGAA	ACATGCTGAA	CCTGAGTGAT	GCACCAAATA
551	CAGTTGCAAC	CATGGCAACA	GCAGTTCTGA	TTGGCTATGG	TGTATCAAGA
601	GCTGGAGCTG	CTTTTTTTAA	CGAAGTTCGA	AATGCAGTAT	TTGGCAAGGT
651	AGCCCAGAAT	TCAATCCGAA	GAATAGCCAA	AAATGTCTTT	CTCCATCTTC
701	ACAACCTGGA	TCTGGGTTTT	CACCTGAGCA	GACAGACGGG	AGCTTTATCT
751	AAGGCTATTG	ACAGAGGAAC	AAAGGGTATC	AGTTTTGTCC	TGAGTGCTTT
801	GGTATTTAAT	CTTCTTCCCA	TCATGTTTGA	AGTGATGCTT	GTCAGTGGTG
851	TTTTGTATTA	CAAATGCGGT	GCCCAGTTTG	CTTTGGTAAC	CCTTGGAACA
901	CTTGGTACAT	ACACAGCATT	CACAGTTGCA	GTCACACGGT	GGAGAACTAG
951	ATTTAGAATA	GAAATGAACA	AAGCAGATAA	TGATGCAGGT	AATGCTGCTA
1001	TAGACTCACT	GCTGAATTAT	GAAACTGTGA	AGTATTTTAA	TAATGAAAGA
1051	TATGAAGCAC	AGAGATATGA	TGGATTTTTG	AAGACGTATG	AGACTGCTTC
1101	ATTGAAAAGT	ACCTCTACTC	TGGCTATGCT	GAACCTTGGT	CAAAGTGCTA
1151	TTTTTCAGTGT	CGGTTTAACA	GCTATAATGG	TGCTCGCCAG	TCAGGGAATT
1201	GTGGCAGGTA	CCCTTACTGT	TGGAGATCTA	GTAATGGTGA	ATGGACTGCT
1251	TTTTTCAGCTT	TCATTACCCC	TGAACCTTCT	GGGAACTGTA	TATAGAGAGA
1301	CTAGACAAGC	ACTCATAGAT	ATGAACACCT	TGTTTACTCT	ACTCAAGGTA
1351	GACACCCAAA	TTAAAGACAA	AGTGATGGCA	TCTCCCCTTC	AGATCACACC
1401	ACAGACAGCT	ACCGTGGCCT	TTGATAATGT	GCATTTTGAA	TACATTGAGG
1451	GCCAGAAAGT	CCTTAGTGGA	ATATCCTTTG	AAGTCCCTGC	AGGAAAGAAA
1501	GTGGCCATTG	TAGGAGGTAG	TGGGTCAGGG	AAAAGCACAA	TAGTGAGGCT
1551	ATTATTTTCGC	TTCTATGAGC	CTCAAAAGGG	TAGCATTTAT	CTTGCTGGTC
1601	AAAATATACA	AGATGTGAGC	CTGGAAAGCC	TTCGGAGGGC	AGTGGGAGTG
1651	GTACCTCAGG	ATGCTGTCCT	CTTCCATAAT	ACTATTTATT	ACAACCTCTT
1701	ATATGGAAAC	ATCAGTGCTT	CACCTGAGGA	AGTGTATGCA	GTGGCAAAAT
1751	TAGCTGGACT	TCATGATGCA	ATTCTTCGAA	TGCCACATGG	ATATGACACC
1801	CAAGTAGGGG	AACGAGGACT	CAAGCTTTCA	GGAGGAGAAA	AGCAAAGAGT
1851	AGCAATTGCA	AGAGCCATTT	TGAAGGACCC	CCCAGTCATA	CTCTATGATG
1901	AAGCTACTTC	ATCGTTAGAT	TCGATTACTG	AAGAGACTAT	TCTTGGTGCC
1951	ATGAAGGATG	TGGTCAAACA	CAGAACTTCT	ATTTTCATTG	CACACAGATT
2001	GTCAACAGTG	GTTGATGCAG	ATGAAATCAT	TGTCTTGGAT	CAGGGTAAGG
2051	TAGCCGAACG	TGGTACCCAC	CATGGTTTGC	TTGCTAACCC	TCATAGTATC
2101	TATTCAGAAA	TGTGGCATAc	ACAGAGCAGC	CGTGTGCAGA	ACCATGATAA
2151	CCCCAAATGG	GAAGCAAAGA	AAGAAAATAT	ATCCAAAGAG	GAGGAAAGAA
2201	AGAAACTACA	AGAAGAAATT	GTCAATAGTG	TGAAAGGCTG	TGGAAACTGT
2251	TCGTGCTAAG	TCACATAAGA	CATTTTCTTT	TTTTGTTGTT	TTGGACTACA
2301	TATTTGCACT	GAAGCAGAAT	TGTTTTATTA	AAAAAATCAT	ACATT

**FIGURE 1B**

1	ATGGCGCTGC	TCGCGATGCA	TTCTTGGCGC	TGGGCGGCCG	CGGCGGCTGC
51	TTTCGAAAAG	CGCCGGCACT	CCGCGATTCT	GATCCGGCCT	TTAGTCTCTG
101	TTAGCGGCTC	AGGTCCGCAG	TGGAGGCCAC	ATCAACTCGG	CGCCTTGGGA
151	ACCGCTCGAG	CCTACCAGAT	TCCAGAGTCA	TTAAAAAGTA	TCACATGGCA
201	GAGATTGGGA	AAAGGCAATT	CAGGACAGTT	CTTAGATGCT	GCAAAGGCTC
251	TCCAGGTATG	GCCACTGATA	GAAAAGAGGA	CATGTTGGCA	TGGTCATGCA
301	GGAGGAGGAC	TCCACACAGA	CCCAAAAGAA	GGGTAAAAG	ATGTTGATAC
351	TCGGAAAATC	ATAAAAGCAA	TGCTTTCTTA	TGTGTGGCCC	AAAGACAGGC
401	CAGATCTACG	AGCTAGAGTT	GCCATTTCGC	TGGGATTTTT	GGGTGGTGCA
451	AAGGCCATGA	ATATTGTGGT	TCCCTTCATG	TTTAAATATG	CTGTAGACAG
501	CCTCAACCAG	ATGTCGGGAA	ACATGCTGAA	CCTGAGTGAT	GCACCAAATA
551	CAGTTGCAAC	CATGGCAACA	GCAGTTCTGA	TTGGCTATGG	TGTATCAAGA
601	GCTGGAGCTG	CTTTTTTTAA	CGAAGTTCGA	AATGCAGTAT	TTGGCAAGGT
651	AGCCCAGAAT	TCAATCCGAA	GAATAGCCAA	AAATGTCTTT	CTCCATCTTC
701	ACAACCTGGA	TCTGGGTTTT	CACCTGAGCA	GACAGACGGG	AGCTTTATCT
751	AAGGCTATTG	ACAGAGGAAC	AAAGGGTATC	AGTTTTGTCC	TGAGTGCTTT
801	GGTATTTAAT	CTTCTTCCCA	TCATGTTTGA	AGTGATGCTT	GTCAGTGGTG
851	TTTTGTATTA	CAAATGCGGT	GCCCAGTTTG	CTTTGGTAAC	CCTTGGAACA
901	CTTGGTACAT	ACACAGCATT	CACAGTTGCA	GTCACACGGT	GGAGAACTAG
951	ATTTAGAATA	GAAATGAACA	AAGCAGATAA	TGATGCAGGT	AATGCTGCTA
1001	TAGACTCACT	GCTGAATTAT	GAAACTGTGA	AGTATTTTAA	TAATGAAAGA
1051	TATGAAGCAC	AGAGATATGA	TGGATTTTTG	AAGACGTATG	AGACTGCTTC
1101	ATTGAAAAGT	ACCTCTACTC	TGGCTATGCT	GAACTTTGGT	CAAAGTGCTA
1151	TTTTCAGTGT	CGGTTTAACA	GCTATAATGG	TGCTCGCCAG	TCAGGGAATG
1201	GTGGCAGGTA	CCCTTACTGT	TGGAGATCTA	GTAATGGTGA	ATGGACTGCT
1251	TTTTCAGCTT	TCATTACCCC	TGAACTTTCT	GGAAGTGTGA	TATAGAGAGA
1301	CTAGACAAGC	ACTCATAGAT	ATGAACACCT	TGTTTACTCT	ACTCAAGGTA
1351	GACACCCAAA	TTAAAGACAA	AGTGATGGCA	TCTCCCCTTC	AGATCACACC
1401	ACAGACAGCT	ACCGTGGCCT	TTGATAATGT	GCATTTTGAA	TACATTGAGG
1451	GCCAGAAAAGT	CCTTAGTGGA	ATATCCTTTG	AAGTCCCTGC	AGGAAAGAAA
1501	GTGGCCATTG	TAGGAGGTAG	TGGGTCAGGG	AAAAGCACAA	TAGTGAGGCT
1551	ATTATTTTCGC	TTCTATGAGC	CTCAAAAGGG	TAGCATTTAT	CTTGCTGGTC
1601	AAAATATACA	AGATGTGAGC	CTGGAAAGCC	TTCGGAGGGC	AGTGGGAGTG
1651	GTACCTCAGG	ATGCTGTCCT	CTTCCATAAT	ACTATTTATT	ACAACCTCTT
1701	ATATGGAAAC	ATCAGTGCTT	CACCTGAGGA	AGTGTATGCA	GTGGCAAAT
1751	TAGCTGGACT	TCATGATGCA	ATTCTTCGAA	TGCCACATGG	ATATGACACC
1801	CAAGTAGGGG	AACGAGGACT	CAAGCTTTCA	GGAGGAGAAA	AGCAAAGAGT
1851	AGCAATTGCA	AGAGCCATTT	TGAAGGACCC	CCCAGTCATA	CTCTATGATG
1901	AAGCTACTTC	ATCGTTAGAT	TCGATTACTG	AAGAGACTAT	TCTTGGTGCC
1951	ATGAAGGATG	TGGTCAAACA	CAGAACTTCT	ATTTTCATTG	CACACAGATT
2001	GTCAACAGTG	GTTGATGCAG	ATGAAATCAT	TGTCTTGGAT	CAGGGTAAGG
2051	TAGCCGAACG	TGGTACCCAC	CATGGTTTGC	TTGCTAACCC	TCATAGTATC
2101	TATTCAGAAA	TGTGGCATAC	ACAGAGCAGC	CGTGTGCAGA	ACCATGATAA
2151	CCCCAAATGG	GAAGCAAAGA	AAGAAAATAT	ATCCAAAGAG	GAGGAAAGAA
2201	AGAAACTACA	AGAAGAAATT	GTCAATAGTG	TGAAAGGCTG	TGGAAACTGT
2251	TCGTGCTAAG	TCACATAAGA	CATTTTCTTT	TTTTGTTGTT	TTGGACTACA
2301	TATTTGCACT	GAAGCAGAAT	TGTTTTATTA	AAAAAATCAT	ACATT

FIGURE 1C

**FIGURE 2**



**FIGURE 3**

